ART. VI.—A NEW APPARATUS FOR GIVING ELASTIC SUPPORT TO THE HAND IN CASES OF WRIST-DROP.

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THE advantages claimed for this simple apparatus over others meeting the same need, are: that it is capable of giving firmer support than any which I have seen, among which I would refer especially to the arrangement devised by our colleague, Dr. Van Bibber, of Baltimore, and that it is less likely to slip on the arm, or to get out of repair.

The apparatus is not in principle original, not differing essentially from that used by certain orthopædic surgeons for the attachment of the "rubber muscle." It is made and applied as follows: A piece of strong plaster (rubber plaster is the best) is cut about one and one-half inch wide, and of the length of the forearm. At one of its ends, which we may call the lower end, there are sewed on two narrower strips of plaster, about two feet in length and diverging widely from each other at their point of attachment, and likewise a strip of strong inelastic webbing, which should project some four inches beyond the end of the central strip of plaster, in the direction of its long axis. The plaster is then laid upon the forearm, the broad central strip running from about two and one-half inches above the root of the metacarpal bone of the index finger towards the external condyle of the humerus, the long narrow strips encircling the arm spirally, and the webbing tag extending down over the back of the hand. The plasters are then bandaged into place with a bandage which should be long enough to admit of the use of a few last turns to confine the next part of the apparatus in its proper place.*

This part is made and applied as follows: A piece of tin is cut to about the shape and size of the central plaster, and curved somewhat longitudinally, to give it stiffness, and there are then attached to it two buckles, one at each end, both with their tongues pointing downward in the same direction. This gutter of tin, as it might be called, is adapted to the arm, a slightly spiral twist being given it by the fingers, so that it shall follow the course of the central strip of plaster, and is then confined near its upper end by the remainder of the bandage. The webbing is then brought over the end of this tin splint and buckled on, being drawn up sufficiently tight to clear the tin from the wrist.

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* The turns of the bandage should be securely sewed, or, it might perhaps be a good plan to impregnate them with water-glass.

A strip of strong elastic webbing, doubled if necessary, is then carried from the buckle at the upper end of the tin, passing under a guide of wire at the lower end, to a similar buckle sewed securely on to the back of a strong leather glove near the root of the index finger, and the apparatus is complete, except for finishing touches, which naturally suggest themselves, in the direction of strength and neatness. It might perhaps be well to carry inelastic stays from the lower end of the tin splint to the sides of the hand, to limit lateral motion, but this I have not tried.

The apparatus is cheap and can be manufactured and applied by any intelligent patient. It would seem to be hot and cumbrous, and it certainly does not take entirely the place of living muscles, but an artisan who is enabled by it (as was the case with one of mine), to carry on, even though imperfectly, his trade, is not likely to complain seriously of these inconveniences.